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DIALOG(R) File 399: CA SEARCH(R)
(c) 2011 American Chemical Society. All rts. reserv.
                                       PATENT
  150049533
                CA: 150(4)49533f
  Antim crobial lactoferrin compositions for surfaces, cavities, and
  f oodst uf f
  INVENTOR(AUTHOR): Cadee, Jenneke Adriana; Tips, Peter Dirk; Van Someren,
Geertruida` Dorothéa
  LOCATION: Neth.
  ASSIGNEE: Campina B. V.
  PATENT: U.S. Pat. Appl. Publ.; US 20080318834 A1 DATE: 20081225
  APPLI CATION: US 2008590591 (20080903) *WO 2004NL1849 (20040224)
  PACES: 12pp. CODEN: US
PATENT CLASSI FI CATI ONS:
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      A01N-0063/02
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                 (Item 2 from file: 399)
DIALOG(R) File 399: CA SEARCH(R)
(c) 2011 American Chemical Society. All rts. reserv.
                   CA: 143(14) 254005g
                                                 PATENT
  Antim crobial lact of errin compositions for surfaces, cavities, and food INVENTOR (AUTHOR): Cadee, Jenneke Adriana; Tips, Peter Dirk; Van Someren,
Geertruida Dorothea
  LOCATION: Neth.
  ASSIGNEE: Campina B. V.
  PATENT: PCT International; WO 200579582 A1 DATE: 20050901 APPLICATION: WO 2004EP1849 (20040224)
  PACES: 34 pp. CODEN: F
PATENT CLASSIFICATIONS:
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A01 N- 059/ 00B; A01 N- 037/ 44B DESI GNATED COUNTRI ES: AE; AG; AL; ΑMt AT; AU: AZ; BA; BB; BG: BW BY: CZ: ES: CA: CH; CN; CO: CR; CU: DE: DK; DM DZ; EC; EE; EG; FI: Œ: GD; ΙD; JP: KG; KΡ LC: GH; GM: HR: HU: IL: IN: IS: KE; KR: KZ; LK; LR: LS; Œ: MN, MZ; CM, PG; LV; MD; PH; LT; LU; MA; MK; MM MX; NA; NI: NO; NZ PL; MG; SC; SD; SE; SG; SK; SL; SY; TJ; TM; TN; TR; TT; TZ; UA; UG; US; YU; ZA; ZM; ZW DESIGNATED REGIONAL: BW, GH; GM; KE; LS; MW, MZ Z; TZ; UG; ZM, ZW, AM, AZ; BY; KG; KZ; MD; RU; TJ; TM; AT; BE; CZ; DE; DK; EE; ES; FI; FR; GB; GR; HU; IE; IT; LU; MC; NL; PT; SK; TR; BF; BJ; CF; CG; CI; CM; GA; GN; GQ; GW, ML; MR; NE; SN; RO; RU: PT: UZ; VC; VN: -, vo, viv, ro, SD; SL; SZ; T 3; CH; CY; CZ;); SE; SI; SK; RO; TD: TG

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DIALOG(R) File 399: CA SEARCH(R)
(c) 2011 American Chemical Society. All rts. reserv.
  150049533
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  Antim crobial lactoferrin compositions for surfaces, cavities, and
  f oodst uf f
  INVENTOR(AUTHOR): Cadee, Jenneke Adriana; Tips, Peter Dirk; Van Someren,
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LOCATION: Neth.
  ASSIGNEE: Campina B. V.
  PATENT: U.S. Pat. Appl. Publ.; US 20080318834 A1 DATE: 20081225
  APPLI CATI ON: US 2008590591 (20080903) *WO 2004NL1849 (20040224)
                   CODEN: USXXCO LANGUAGE: English
  PAŒS: 12pp.
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DIALOG(R) File 399: CA SEARCH(R)
(c) 2011 American Chemical Society. All rts. reserv.
                CA: 143(14) 254005g
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  Antimicrobial lactoferrin compositions for surfaces, cavities, and food INVENTOR(AUTHOR): Cadee, Jenneke Adriana; Tips, Peter Dirk; Van Someren,
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  LOCATION: Net h.
  ASSIGNEE: Campina B. V.
  PATENT: PCT International; WO 200579582 A1 DATE: 20050901
  APPLI CATION: WO 2004EP1849 (20040224)
  PACES: 34 pp. CODEN: F
PATENT CLASSI FI CATI ONS:
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>>>KWC option is not available in file(s): 399
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DIALOG(R) FILE 399: CA SEARCH(R)
(c) 2011 American Chemical Society. All rts. reserv.
                 CA: 150(4)49533f
                                        PATENT
  150049533
  Antimicrobial lactoferrin compositions for surfaces, cavities, and
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  INVENTOR(AUTHOR): Cadee, Jenneke Adriana; Tips, Peter Dirk; Van Someren,
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  LOCATION: Neth.
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  PACES: 12pp. CODEN: US
PATENT CLASSI FI CATI ONS:
                  CODEN: USXXCO` LANGUAGE: English
    CLASS:
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      A23L-0003/3526
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DIALÓG(R) File`399: CA SEARCH(R)
(c) 2011 American Chemical Society. All rts. reserv.
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  Antimicrobial lactoferrin compositions for surfaces, cavities, and food INVENTOR(AUTHOR): Cadee, Jenneke Adriana; Tips, Peter Dirk; Van Someren,
Geertruida Dorothéa
  LCCATION: Net h.
  ASSIGNEE: Campina B. V.
PATENT: PCT International; WO 200579582 A1 DATE: 20050901
APPLICATION: WO 2004EP1849 (20040224)
  PAGES: 34 pp. CODEN: PLXXD2 LANGUAGE: English PATENT CLASSIFICATIONS:
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(c) 2011 The Thomson Corporation. All rts. reserv.
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SUPEROXI DE- DEPENDENT AND ASCORBATE- DEPENDENT FORMATI ON OF HYDROXYL RADI CALS
  FROM HYDROGEN PEROXIDE IN THE PRESENCE OF LRON ARE LACTOFERRIN AND
  TRANSFERRIN PROMOTERS OF HYDROXYL RADICAL GENERATION?
AUTHOR: ARUOWA O I (Reprint); HALLIWELL B
AUTHOR ADDRESS: DEP OF BLOCHEMISTRY, KINGS COLL KCC, STRAND CAMPUS,
  STRAND, LONDON WC2R 2LS, UK**UK
JOURNAL: Bi ochemical Journal 241 (1): p273-278 1987
I SSN: 0264-6021
DOCUMENT TYPE: Article
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RECORD TYPE: Abstract LANGUAGE: ENGLISH

... ASCORBATE- DEPENDENT FORMATION OF HYDROXYL RADICALS FROM HYDROGEN PEROXI DE IN THE PRESENCE OF IRON ARE LACTOFERRIN AND TRANSFERRIN PROMOTERS OF HYDROXYL RADICAL GENERATION?

ABSTRACT: Apo-lact of errin and apo-transferrin protect against iron-ion-dependent hydroxyl-radical (.OH) generation from H2O2 in the presence of superoxide radicals or ascorbic acid at pH 7.4, whether the necessary iron is added as ionic iron or as ferritin. Iron-loaded transferrin and lact of errin [2 mol of Fe(III)/mol] show no protective ability, but do not themselves accelerate.OH production unless chelating agents are present in the reaction mixture, especially if the proteins are incorrectly loaded with iron. At acidic pH values, the protective ability of the apoproteins is diminished, and the fully iron-loaded proteins...? t s13/3, k/1-3

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13/3, K/1 (Item 1 from file: 5)
DIALOG(R) File 5: Biosis Previews(R)
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08608516 BIOSIS NO.: 198783087407
SUPEROXI DE- DEPENDENT AND ASCORBATE- DEPENDENT FORMATION OF HYDROXYL RADICALS
FROM HYDROŒN PEROXI DE IN THE PRESENCE OF IRON ARE LACTOFERRIN AND
TRANSFERRIN PROMOTERS OF HYDROXYL RADICAL ŒNERATION?
AUTHOR: ARUOMA O I (Reprint); HALLIWELL B
AUTHOR ADDRESS: DEP OF BIOCHEMISTRY, KING'S COLL KCC, STRAND CAMPUS,
STRAND, LONDON WC2R 2LS, UK**UK
JOURNAL: Biochemical Journal 241 (1): p273-278 1987
ISSN: 0264-6021
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: ENGLISH

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13/3, K/2 (Item 1 from file: 24)
DIALOG(R) File 24: CSA Life Sciences Abstracts
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0001649204 IP ACCESSION NO: 3955130 Effect of some physical and chemical factors on the bactericidal activity of human lactoferrin and transferrin against Yersinia pseudotuberculosis

Salamah, AA; Al-Chaidi, AS

Microbiol. Unit, Botany and Microbiol. Dep., Coll. Sci., King Saud Univ., P.O. Box 2455, Riyadh 11451, Saudi Arabia

New M crobiologica, v 18, n 3, p 275-282, 1995 ADDL. SOURCE I NFO: M CROBIOLOGICA (BOLOGNA), vol. 18, no. 3, pp. 275-282, 1995 PUBLICATION DATE: 1995

DOCUMENT TYPE: Journal Article RECORD TYPE: Abstract LANGUAGE: English SUMMARY LANGUAGE: English I SSN: 1121-7138

FILE SEGMENT: Bacteriology Abstracts (M crobiology B); Industrial & Applied M crobiology Abstracts (M crobiology A)

Effect of some physical and chemical factors on the bactericidal activity of human lactoferrin and transferrin against Yersinia pseudot uber cul osi s

ABSTRACT:

The iron-chelating proteins lact of errin and transferrin have been shown to be bactericidal for a variety of organisms. In this study, the effect of pH, temperature, their concentration, and magnesium and calcium on the bactericidal activity against Yersinia pseudotuberculosis was investigated. The bactericidal activity of lactoferrin was higher at acid pH, whereas, the bactericidal activity of transferrin was higher at alkaline pH. Both were not efficient at 4 degree, 15 degree and 25 degree C, but they were efficient at 37 degree C. Lactoferrin, but not transferrin, was very efficient at 42 degree C. The activity of both were...

..did not effect their activity up to 60 mM, whereas, magnesium reduced the activity of lactoferrin only.

IDENTIFIERS: lactoferrin; transferrin; iron

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08379877 PM D: 3010865

The effect of pH on yields of hydroxyl radicals produced from superoxide by potential biological iron chelators.

Baker M S; Gebicki J M

Archives of biochemistry and biophysics (UNITED STATES) May 1 1986. 246 (2) p581-8, ISSN 0003-9861--Print 0003-9861--Linking

Journal Code: 0372430 Publishing Model Print

Document type: Journal Article; Research Support, Non-U.S. Gov't Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

The effect of pH on yields of hydroxyl radicals produced from superoxide by potential biological iron chelators. ... catalysts were tested. Citrate was the only organic salt which showed catalytic activity at neutral pH. Adenine nucleotides had little or no activity under similar conditions. Heme proteins were inactive and any

catalytic activity measured with transferrin, lactoferrin, and conalbumin could be explained by free Fe3+ released by the former two at acid pH. Many of the potential catalysts tested showed maximum

activity near pH 4.8, where the rate of dismutation of C2-. is

Page 7

highest. This suggests that in...

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were able to assist the conversion of C2-. to HC with significant
efficiency at neutral pH in homogeneous solutions.

Descriptors: *Hydroxides; *Iron Chelating Agents; *Superoxides
Chemical Name: Benzoates; Carrier Proteins; Ferric Compounds;
                                                                                                   Free
Radicals; Hydroxides; Iron Chelating Agents; Phosphates; Superoxides;
Fe(III)-EDTA; Hydroxyl Radical; Edetic Acid? s (lactoferrin and (chelat?) and (acid?(w)pH))
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              118562
       S14
                         (LACTÒFERRIN AND (CHELAT?) AND (ACID?(W)PH))
? rd
       S15
                         RD (unique items)
? t s15/3, k/1-5
>>>KWC option is not available in file(s): 399
DIALCG(R) File 5: Biosis Pro:
                    `5:Biosis Previews(Ŕ)
(c) 2011 The Thomson Corporation. All rts. reserv.
11175461 BIOSIS NO.: 199293018352
POTENT BACTERI CI DAL ACTI VI TY OF BOVI NE LACTOFERRI N HYDROLYSATE
PRODUCED BY HEAT TREATMENT AT ACI DI C PH
AUTHOR: SAI TO H (Reprint); M YAKAWA H; TAMURA Y; SHI MAMURA S; TOM TA M
AUTHOR ADDRESS: NUTRI TI ONAL SCI LAB, MORI NAGA M LK I NDUSTRY CO LTD, 1-83
   5- CHOVE, HI GASHI HARA ZAMA- CI TY, KANAGAWA- PREF 228, JAPAN* * JAPAN
JOURNAL: Journal of Dairy Science 74 (11): p3724-3730 1991
I SSN: 0022-0302
DOCUMENT TYPE: Article RECORD TYPE: Abstract
LANGUAGE: ENGLISH
POTENT BACTERI CI DAL ACTI VI TY OF BOVI NE LACTOFERRI N HYDROLYSATE
   PRODUCED BY HEAT TREATMENT AT ACIDIC PH
ABSTRACT: A hydrolysate of bovine lact of errin produced by heat
   treatment under acidic conditions had antibacterial activity at
   concentrations of 10 .mu...
...culture medium. The optimal degree of hydrolysis for this activity was
   about 10% Heat-treated lactoferrin, treated at pH 2.0 and
   120. degree. C for 15 min and degree of...
...10% had no Fe-binding capacity (0%) and less antigenicity (about 10-6)
  than untreated lactoferrin. Heat-treated lactoferrin
  increased in antibacterial activity, and the activity was maintained in an Fe-rich medium. After fractionation of heat-treated lactoferrin
  by reverse-phase HPLC, several peptide fractions were found that had strong antibacterial activity. It was suggested that lactoferrin latently contains at least one bactericidal domain that is activated upon
```

Page 8

release by limited acid hydrolysis of the protein. The bactericidal activity of the peptide fragments of lactoferrin was shown to have

no relation to Fe chelation, in contrast with the antibacterial mechanism of native lactoferrin.

DESCRIPTORS: PATHOGENS PH ANTIGENICITY HIGH PERFORMANCE LIQUID CHROMATOGRAPHY PROTEINS PEPTIDES CHELATION

15/3, K/2 (Item 2 from file: 5)
DIALOG(R) File 5: Biosis Previews(R)
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08608516 BIOSIS NO.: 198783087407
SUPEROXI DE- DEPENDENT AND ASCORBATE- DEPENDENT FORMATION OF HYDROXYL RADICALS FROM HYDROŒN PEROXI DE IN THE PRESENCE OF IRON ARE LACTOFERRIN AND TRANSFERRIN PROMOTERS OF HYDROXYL RADICAL ŒNERATION?
AUTHOR: ARUOMA O I (Reprint); HALLIWELL B
AUTHOR ADDRESS: DEP OF BIOCHEMISTRY, KING'S COLL KCC, STRAND CAMPUS, STRAND, LONDON WC2R 2LS, UK** UK
JOURNAL: Biochemical Journal 241 (1): p273-278 1987
ISSN: 0264-6021
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: ENGLISH

... ASCORBATE- DEPENDENT FORMATION OF HYDROXYL RADICALS FROM HYDROGEN PEROXIDE IN THE PRESENCE OF IRON ARE LACTOFERRIN AND TRANSFERRIN PROMOTERS OF HYDROXYL RADICAL GENERATION?

ABSTRACT: Apo-lact of errin and apo-transferrin protect against iron-ion-dependent hydroxyl-radical (.OH) generation from H2O2 in...

...the necessary iron is added as ionic iron or as ferritin. Iron-loaded transferrin and lactoferrin [2 mol of Fe(III)/mol] show no protective ability, but do not themselves accelerate. OH production unless chelating agents are present in the reaction mixture, especially if the proteins are incorrectly loaded with iron. At acidic pH values, the protective ability of the apoproteins is diminished, and the fully iron-loaded proteins...

15/3, K/3 (Item 3 from file: 5)
DIALOG(R) File 5: Biosis Previews(R)
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08183119 BIOSIS NO.: 198682029506
THE EFFECT OF PH ON YIELDS OF HYDROXYL RADICALS PRODUCED FROM SUPEROXIDE BY POTENTIAL BIOLOGICAL IRON CHELATORS
AUTHOR: BAKER M S (Reprint); GEBICKI J M
AUTHOR ADDRESS: SCH BIOL SCI, MACQUARIE UNIV, NORTH RYDE, NSW 2113, AUST** AUSTRALIA
JOURNAL: Archives of Biochemistry and Biophysics 246 (2): p581-588 1986
ISSN: 0003-9861
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: ENGLISH

... EFFECT OF PH ON YI ELDS OF HYDROXYL RADI CALS PRODUCED FROM SUPEROXI DE BY POTENTI AL BI OLOGI CAL I RON CHELATORS

... ABSTRACT: activity under similar conditions. Heme proteins were inactive and any catalytic activity measured with transferrin, lactoferrin, and conal bumin could be explained by free Fe3+ released by the former two at acid pH. Many of the potential catalysts tested showed

Page 9

maximum activity near pH 4.8, where the...

15/3, K/4 (Item 1 from file: 24) DIALOG(R) File 24: CSA Life Sciences Abstracts (c) 2011 CSA. All rts. reserv.

0001649204 IP ACCESSION NO: 3955130
Effect of some physical and chemical factors on the bactericidal activity of human lactoferrin and transferrin against Yersinia pseudotuberculosis

Salamah, AA; Al-Chaidi, AS M crobiol. Unit, Botany and M crobiol. Dep., Coll. Sci., King Saud Univ., P.O. Box 2455, Riyadh 11451, Saudi Arabia

New M crobiologica, v 18, n 3, p 275-282, 1995 ADDL. SOURCE I NFC: M CROBI OLOGICA (BOLOGNA), vol. 18, no. 3, pp. 275-282, 1995

PUBLICATION DATE: 1995

DOCUMENT TYPE: Journal Article
RECORD TYPE: Abstract
LANGUAGE: English
SUMMARY LANGUAGE: English
ISSN: 1121-7138
FILE SEGMENT: Bacteriology Abstracts (M crobiology B); Industrial & Applied
M crobiology Abstracts (M crobiology A)
Effect of some physical and chemical factors on the bactericidal activity
of human lactoferrin and transferrin against Yersinia
pseudotuberculosis

ABSTRACT:

The iron-chelating proteins lactoferrin and transferrin have been shown to be bactericidal for a variety of organisms. In this...

...and calcium on the bactericidal activity against Yersinia pseudotuberculosis was investigated. The bactericidal activity of lactoferrin was higher at acid pH, whereas, the bactericidal activity of transferrin was higher at alkaline pH. Both were not efficient...

...degree , 15 degree and 25 degree C, but they were efficient at 37 degree C. Lactoferrin, but not transferrin, was very efficient at 42 degree C. The activity of both were...

 \dots did not effect their activity up to 60 mMM whereas, magnesium reduced the activity of lact of errin only.

DESCRIPTORS: antibacterial agents; bactericides; chelation; Yersinia pseudotuberculosis
IDENTIFIERS: lactoferrin; transferrin; iron

15/3, K/5 (Item 1 from file: 73) DIALOG(R) File 73: EMBASE (c) 2011 Elsevier B. V. All rts. reserv.

0073117606 EMBASE/ Medline No: 1986196640
The effect on pH on yields of hydroxyl radicals produced from superoxide by potential biological iron chelators
Baker M S.; Gebicki J. M

School of Biological Sciences, Macquarie University, North Ryde, NSW 2113 Page 10

, Australia: CORRESP. AUTHOR/AFFIL: School of Biological Sciences, Macquarie University, North Ryde, NSW 2113, Australia

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Archives of Biochemistry and Biophysics (ARCH. BIOCHEM BIOPHYS.) (United States) Cctober 1, 1986, 246/2 (581-588) CODEN: ABBLA ISSN: 0003-9861 DCCUMENT TYPE: Journal; Article RECORD TYPE: Abstract LANGUAGE: English
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... effect on pH on yields of hydroxyl radicals produced from superoxide by potential biological iron chelators

...activity under similar conditions. Here proteins were inactive and any catalytic activity measured with transferrin, lactoferrin, and conal bumin could be explained by free Fe SUP 3+ released by the former two at acid pH. Many of the potential catalysts tested showed maximum activity near pH 4.8, where the...

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MEDICAL DESCRIPTORS:
*iron chelation; *ph
ORIG DESCRIPTORS:
? ds
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Set	ltems	Description
S1	56	E1- E12
00		
S2	2	S1 AND LACTOFERRIN
S3	2	RD (unique items)
S4	32	E1- E12
S3 S4 S5	2	S4 AND LACTOFERRIN
S6	2	RD (unique items)
S6 S7	44	E1- E12
S8	2	S7 AND LACTOFERRIN
S9	0	(LACTOFERRIN AND (ACIDS OR PH) AND (CHELATS))
S10	4610	(LACTOFERRIN AND (ACIDS OR PH))
S11	207	Š10 AND (CHELATINĠ OR CHELATOR)
S12	14	S11 AND (ACID?(W)PH)
S13	3	RD (unique itèms)
	_	
S14	2 <u>1</u>	(LACTOFERRIN AND (CHELAT?) AND (ACID?(W)PH))
S15	5	RD (unique items)